



- NOTES:
- WHEN MACHINING VACUUM PARTS, USE OF SILICONE AND SULPHUR-BASED CUTTING FLUIDS IS PROHIBITED. USE ONE OF THE FOLLOWING:
A) CIMCOOL 5 STAR 49
B) TRIM SOL
 - ALL WELDS JOINING BELLOWS AND FLANGES ARE TO BE INTERNAL
 - BELLOWS ASSEMBLY SHALL BE LEAK TESTED USING A MASS SPECTROMETER WITH MINIMUM SENSITIVITY FOR HELIUM OF 2×10^{-10} STANDARD CC/SEC PER LEAK METER DIVISION, SUCH AS
ALCATEL SAM-110TCL
Du PONT CEC 24-120B
VARIAN MS-9, MS-90 OR MS-18
CALIBRATION OF THE LEAK DETECTOR SENSITIVITY SHALL BE PERFORMED JUST PRIOR TO TRESTING.
FINAL TEST WILL CONSIST OF SURROUNDING THE ASSEMBLY (BAGGING) WITH HELIUM. THE ASSEMBLY WILL BE REJECTED IF A 2% DEFLECTION ON THE MOST SENSITIVE RANGE OF THE LEAK DETECTOR IS SENSED WITHIN 1 MIN.
 - KEEP THE PART CLEAN, AND WRAP FOR UHV PACKING WITH ALUMINUM FOIL.
 - DIMENSIONS IN [] ARE MILLIMETERS

REF. SOURCES

- 2 STANDARD BELLOWS CO.
375 TUNPIKE AVE.
WINDSOR LOCKS, CONN. 06096
- 1 MDC VACUUM PRODUCTS CORP.
23842 CABOT BLVD.
HAYWARD, CA. 94545-1651



3	ST'D. BELLOWS CAT. #220 - 104 - 5 - AA	WITH EXTENDED ENDS	1
2	#100030	8" CF. ROTATABLE FLANGE	1
1	#110025	6" CF. NONROTATABLE FLANGE	1

ITEM	DWG/PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY
PARTS LIST				
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES				
TOLERANCES				
DECIMALS	ANGLES			
.1	.03 [7620]	.25		
.XX	.01 [0.25]			
.XXX	.005 [0.127]			
SURFACE ROUGHNESS 125 ✓				
REMOVE ALL BURRS AND BREAK SHARP EDGES TO RAZ.				
SURFACE FINISH TO BE IN ACCORDANCE WITH LATEST ASST 144				
DIMENSIONS & TOLERANCES IN ACCORDANCE WITH LATEST ASST 144				
DO NOT SCALE DRAWING				
LOG NUMBER A2173300		THIS DRAWING IS THE PROPERTY OF ARGONNE NATIONAL LABORATORY		
DESIGNED BY MUSCIA	DATE 1/20/95	CHIEF DESIGN ENGINEER D. SHU	DATE 4/12/95	TITLE ADVANCED PHOTON SOURCE V2-74 WELDED BELLOWS ASSY. 6" - 8" CF. 1" I.D. X 175mm
CHECKED BY D. SHU	DATE 4/12/95	OP LEADER T.M. KUZAY	DATE 4/12/95	
DESIGNER MUSCIA	DATE 4/12/95	PROJECT MGR		
RESPONSIBLE ENGINEER D. SHU	DATE 4/12/95	APPROVED/RELEASED		
MATERIAL SEE PARTS LIST		SCALE HALF SIZE SHEET 1 of 1		
		DRAWING NUMBER P4105090702-740000-00		